APPLICATION: A005630 PERMIT: 016478

YEAR: 2010

## **Additional Remarks**

All data is preliminary and subject to change. Water diversion and use have been allocated to the individual Permits 16478, 16479, 16481, 16482, and 16483 governing the primary operations of the State Water Project (SWP) consistent with the water rights priorities. However, SWP operations are not segmented by individual permit. The SWP is operated as a single coordinated project consistent with the joint terms and conditions specified in Water Rights Decision 1641 (D1641) and the criteria specified in the biological opinions for the protection of Delta smelt and anadromous fishes. Operations are also coordinated with the U.S. Department of Interior, Bureau of Reclamation consistent with the provisions of the Coordinated Operations Agreement (COA) dated November 24, 1986. The SWP is a large complex project with nearly 700 miles of aqueduct, numerous storage and regulating reservoirs, multiple diversion facilities, and several different water supply sources. Allocating diversion and use to individual permits requires numerous simplifying assumptions due to the complexity of the project. the substantial geographic distribution of facilities, multiple water sources, numerous rediversion and delivery locations and multiple authorized purposes of use, both consumptive and non-consumptive. Those assumptions do not necessarily reflect actual project operations or the physical environment. In order to allow allocation of diversion and use to individual permits for purposes of annual reporting, project operations were assumed to be instantaneous at all locations throughout the project on any given day. While it is recognized that there is substantial time lag between diversions and releases at Lake Oroville, the Sacramento/San Joaquin Delta and deliveries throughout the SWP, the assumption is necessary to allow allocation of diversion and use to individual permits and is considered sufficient for annual reporting purposes. Quantities for diversion to storage do not include quantities for the smaller reregulating reservoirs.

- Item 2: SWP water rights permit terms and conditions are specified in D1641. There was one minor exceedence of the D1641Export/Inflow criteria in 2010. The E/I ratio exceeded 65% (actual 68%) for two days on October 11 and 12, 2010. The exceedence was reported to the State Water Resources Control Board on October 25, 2010. The exceedence was the result of lower than expected inflows to the Delta due to a shift in timing of Mokelumne River pulse flows.
- Item 7: The SWP is a large complex water supply system consisting of 29 dams, 30 pumping and generating plants and approximately 675 miles of aqueducts. DWR diverts water under its permits for irrigation, industrial, municipal, domestic, incidental power, recreation, salinity control and fish and wildlife enhancement purposes. The SWP delivers water to 29 long-term water supply contractors serving approximately 25 million people and providing irrigation to approximately 750,000 acres of farmland. Recreation opportunities at SWP facilities include boating, fishing, water contact sports and camping, among others. DWR generates incidental power under permits 16478, 16479, 16481, and 16482 at the Gianelli, Alamo, Warne, Mojave Siphon, and Devil Canyon powerplants. (total installed capacity 626 MW) Power is also generated by the flows appropriated under the above permits at the Castaic Powerplant owned and operated by Los Angeles Department of

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## **Additional Remarks**

Water and Power (1250 MW). Specific information regarding SWP operations and deliveries are contained in DWR Bulletin 132. The Division of Water Rights receives a copy of Bulletin when it is released. It is also available online at <a href="http://www.water.ca.gov/swpao/bulletin.cfm">http://www.water.ca.gov/swpao/bulletin.cfm</a>.

- Item 8: The quantities shown in Item 8 reflect those diverted under Permit 16478 only. The data contained in the attached tables reflect the overall operation of the SWP and include water use under Permits 16478, 16479, 1648, 16482 and 16483 which authorize use for irrigation, domestic, municipal, industrial. salinity control, recreational and fish and wildlife enhancement purposes, both consumptive and nonconsumptive purposes. The authorized season of diversion to storage at Oroville under Permits 16478 and 16479, September 1 through July 31, does not coincide with the annual reporting period of January 1 through December 31. The calendar year reporting period encompasses portions of the 2009/2010 and 2010/2011 water years. Season for direct diversion is January 1 through December 31 of each year. The quantities shown in item 8 reflect the water directly diverted or diverted to storage consistent with the terms and conditions of Permit 16478 during each month of calendar year 2010 for all authorized purposes of use. Total diversion to storage in 2010 at Lake Oroville under Permits 16478 and 16479 was 2,258,461 acre-feet.
- Item 9: Direct diversion is authorized under Permit 16478 at both the Oroville/Thermalito complex and from the Sacramento San Joaquin Delta channels. The quantities shown reflect diversions at both locations.
- Item 10: Lake Oroville did not spill in 2010. Water level at minimum storage during calendar year 2010 was 148.2 feet below the sill of the gated spillway of Oroville Dam (Elevation 813.60 feet). Water level at maximum storage was 29.7 feet above the sill of the gated spillway. Normal operating maximum elevation for Oroville Reservoir is 899.0 feet. The SWP reservoirs south of the Delta are designed for offstream storage and are operated to avoid spill. Water may be directly diverted from the Delta channels or rediverted from Lake Oroville. Water levels fluctuate substantially throughout the year as DWR diverts or rediverts water to individual reservoirs depending on Project supplies and regional demands.